SUBCHAPTER F: STANDARD PERMITS

§§116.610-116.621 Effective May 22, 1997

§116.610. Applicability.

- (a) Pursuant to the Texas Clean Air Act (TCAA), §382.051, a project which meets the requirements for a standard permit listed in this subchapter is hereby entitled to the standard permit; provided the following conditions listed in this section are met. For the purposes of this subchapter, project means the construction or modification of a facility or a group of facilities submitted under the same registration claim.
- (1) any project which results in a net increase in emissions of air contaminants from the project other than carbon dioxide, water, nitrogen, methane, ethane, hydrogen, oxygen, or those for which a National Ambient Air Quality Standard has been established must meet the emission limitations of §106.261(3) or (4) or §106.262(3) of this title (relating to Facilities (Emission Limitations), and Facilities (Emission and Distance Limitations)), unless otherwise specified by a particular standard permit;
- (2) construction or operation of the project must be commenced prior to the effective date of a revision to this subchapter under which the project would no longer meet the requirements for a standard permit;
- (3) the proposed project must comply with the applicable provisions of the Federal Clean Air Act (FCAA), §111 (regarding Federal New Source Performance Standards) and §112 (regarding Hazardous Air Pollutants);
- (4) the owner or operator of the facility shall register the proposed project in accordance with §116.611 of this title (relating to Registration Requirements).
- (b) Any project, except those authorized under §116.617 of this title (relating to Standard Permits for Pollution Control Projects), which constitutes a new major source, or major modification under the new source review requirements of the FCAA, Part C (Prevention of Significant Deterioration Review) or Part D (Nonattainment Review) and regulations promulgated thereunder is subject to the requirements of §116.110 of this title (relating to Applicability) rather than this subchapter.
 - (c) Persons may not circumvent by artificial limitations the requirements of §116.110 of this title.

Adopted April 30, 1997

Effective May 22, 1997

§116.611. Registration Requirements.

(a) Registration for a standard permit shall be sent by certified mail, return receipt requested, or hand delivered to the Texas Natural Resource Conservation Commission (commission) Office of Air Quality, the appropriate commission Regional Office, and any local air pollution program with jurisdiction, before a standard permit can be claimed. The registration must be submitted on a Form PI-1S and must document compliance with the requirements of this section, including, but not limited to:

- (1) the basis of emission estimates;
- (2) quantification of all emission increases and decreases associated with the project being registered;
- (3) sufficient information as may be necessary to demonstrate that the project will comply with \$116.610(b) of this title (relating to Applicability);
- (4) information that describes efforts to be taken to minimize any collateral emissions increases that will result from the project;
 - (5) a description of the project and related process; and
 - (6) a description of any equipment being installed.
- (b) Construction may begin any time after receipt of written notification from the executive director that there are no objections or 45 days after receipt by the executive director of the registration, whichever occurs first, except where a different time period is specified for a particular standard permit.
- (c) Any person claiming a standard permit may certify and register a federally enforceable emission limitation for one or more air contaminants by stating a maximum allowable emission rate in the registration. The certification may be amended and must include documentation of the basis of emission estimates and a written statement by the registrant certifying that the maximum emission rates listed on the registration reflect the reasonably anticipated maximums for operation of the facility. The certified registration shall be maintained on-site and be provided upon request to a representative of the executive director or any air pollution control agency having jurisdiction. For facilities that normally operate unattended, this information shall be maintained at the nearest staffed location within Texas specified by the standard permit holder in the standard permit registration.

Adopted April 30, 1997

Effective May 22, 1997

§116.614. Standard Permit Fees.

Any person who claims a standard permit shall remit, at the time of registration, a flat fee of \$450 for each standard permit claimed. All standard permit fees will be remitted in the form of a check or money order made payable to the Texas Natural Resource Conservation Commission (TNRCC) and delivered with the permit registration to the TNRCC, P.O. Box 13087, Austin, Texas 78753. No fees will be refunded.

Adopted April 6, 1994

Effective May 4, 1994

§116.615. General Conditions.

The following general conditions are applicable to holders of standard permits, but will not necessarily be specifically stated within the standard permit document.

- (1) Protection of public health and welfare. The emissions from the facility must comply with all applicable rules and regulations of the Texas Natural Resource Conservation Commission (commission) adopted under the Texas Health and Safety Code, Chapter 382, and with intent of the Texas Clean Air Act (TCAA), including protection of health and property of the public.
- (2) Standard permit representations. All representations with regard to construction plans, operating procedures, and maximum emission rates in any registration for a standard permit become conditions upon which the facility or changes thereto, must be constructed and operated. It is unlawful for any person to vary from such representations if the change will affect that person's right to claim a standard permit under this section. Any change in condition such that a person is no longer eligible to claim a standard permit under this section requires proper authorization under §116.110 of this title (relating to Applicability). If the facility remains eligible for a standard permit, the owner or operator of the facility shall notify the executive director of any change in conditions which will result in a change in the method of control of emissions, a change in the character of the emissions, or an increase in the discharge of the various emissions as compared to the representations in the original registration or any previous notification of a change in representations. Notice of changes in representations must be received by the executive director no later than 30 days after the change.
- (3) Standard permit in lieu of permit amendment. All changes authorized by standard permit to a facility previously permitted pursuant to \$116.110 of this title shall be administratively incorporated into that facility's permit at such time as the permit is amended or renewed.
- (4) Construction progress. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office not later than 15 working days after occurrence of the event, except where a different time period is specified for a particular standard permit.
- (5) Start-up notification. The appropriate air program regional office of the commission and any other air pollution control program having jurisdiction shall be notified prior to the commencement of operations of the facilities authorized by the standard permit in such a manner that a representative of the executive director may be present. For phased construction, which may involve a series of units commencing operations at different times, the owner or operator of the facility shall provide separate notification for the commencement of operations for each unit. A particular standard permit may modify start-up notification requirements.
- (6) Sampling requirements. If sampling of stacks or process vents is required, the standard permit holder shall contact the Office of Air Quality and any other air pollution control program having jurisdiction prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The standard permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant.
- (7) Equivalency of methods. The standard permit holder shall demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the standard permit.

Alternative methods must be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the standard permit.

- (8) Recordkeeping. A copy of the standard permit along with information and data sufficient to demonstrate applicability of and compliance with the standard permit shall be maintained in a file at the plant site and made available at the request of representatives of the executive director, United States Environmental Protection Agency, or any air pollution control program having jurisdiction. For facilities that normally operate unattended, this information shall be maintained at the nearest staffed location within Texas specified by the standard permit holder in the standard permit registration. This information must include, but is not limited to, production records and operating hours. Additional recordkeeping requirements may be specified in the conditions of the standard permit. Information and data sufficient to demonstrate applicability of and compliance with the standard permit must be retained for at least two years following the date that the information or data is obtained. The copy of the standard permit must be maintained as a permanent record.
- (9) Maintenance of emission control. The facilities covered by the standard permit may not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. Notification for upsets and maintenance shall be made in accordance with §101.6 and §101.7 of this title (relating to Notification Requirements for Major Upset and Notification Requirements for Maintenance).
- (10) Compliance with rules. Registration of a standard permit by a standard permit applicant constitutes an acknowledgment and agreement that the holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the claiming of the standard permit. If more than one state or federal rule or regulation or permit condition are applicable, the most stringent limit or condition governs. Acceptance includes consent to the entrance of commission employees and designated representatives of any air pollution control program having jurisdiction into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the standard permit.

Adopted April 30, 1997

Effective May 22, 1997

§116.617. Standard Permits for Pollution Control Projects.

This standard permit applies to the installation of emissions control equipment or implementation of control techniques as required by any governmental standard, or undertaken voluntarily, or to replace existing emission control equipment or control techniques. This standard permit also authorizes the substitution of compounds used in manufacturing processes for the purpose of complying with governmental standards or to reduce emission effects.

(1) The emissions limitations of §106.261(3) or (4) and §106.262(3) of this title (relating to Facilities (Emission Limitations), and Facilities (Emission and Distance Limitations)), referenced in §116.610(a)(1) of this title (relating to Applicability) do not apply to this standard permit. This standard permit cannot be used if the registrant receives notification that in the opinion of the executive director there are significant health effects concerns resulting from an increase in emissions of any air contaminant other

than those for which a National Ambient Air Quality Standard has been established, until those concerns are addressed by the registrant to the satisfaction of the executive director.

- (2) The time period of 45 days in §116.611(b) of this title (relating to Registration Requirements) is modified to 30 days.
- (3) Sections §116.615(4) and (5) of this title (relating to General Conditions) are not applicable to this standard permit.
 - (4) Replacement projects are subject to the following:
- (A) The replacement emissions control equipment or control technique must be at least as effective an air pollution control method as the emissions control equipment or control technique being replaced. Equipment installed under this section is subject to all applicable testing and recordkeeping requirements.
- (B) The replacement of emissions control equipment or control technique under this section is not limited to the method of control currently in place. Any type of control equipment or control technique may be replaced with any other type of control equipment or control technique as long as all other requirements of this standard permit are met.
- (C) If the replacement project does not result in an increase in emissions of any air contaminant, the owner or operator of the facility shall submit registration notice not later than 30 days after the operation of the replacement project begins. If the replacement project will result in an increase of any air contaminant, the registration time period requirements of paragraph (2) of this section are applicable.
- (5) Installation of the control equipment or implementation of the control technique must not result in an increase in the facility's production capacity unless the capacity increase occurs solely as a result of the installation of control equipment or the implementation of control techniques on existing units. This paragraph is not intended to limit the owner or operator's ability to recover lost capacity caused by a derate resulting from the installation of control equipment or the implementation of a control technique.
- (A) The owner or operator shall obtain or qualify for any necessary authorization pursuant to \$116.110 of this title (relating to Applicability) or \$116.116 of this title (relating to Changes to Facilities) prior to utilizing any production capacity increase from a pollution control project required by any governmental standard that:
- (i) results in the exceedance of any emission limit in an existing permit, other authorization, or grandfathered baseline; or
- (ii) results in an emissions increase which exceeds the emission reduction due to the installation of control equipment or implementation of control techniques.
- (B) Any production capacity increase resulting from the voluntary installation of controls or the implementation of control techniques may not be utilized until the owner or operator obtains

or qualifies for any necessary authorization pursuant to §116.110 or §116.116 of this title.

- (6) Any emission increase of an air contaminant must occur solely as a result of the installation of control equipment or implementation of a control technique authorized by this section. Emissions increases associated with recovering a derate resulting from the installation of control equipment or the implementation of a control technique are not prohibited by this paragraph.
- (7) Installation of emission control equipment or implementation of a control technique may not include the installation of a new production facility, reconstruction of a production facility as defined in 40 Code of Federal Regulations (CFR) §60.15(b)(1) and (c), or complete replacement of an existing production facility.
- (8) If the project, without consideration of any other increases or decreases not related to the project, will result in a significant net increase in emissions of any criteria pollutant, a person claiming this standard permit shall submit, with the registration, information sufficient to demonstrate that the increase will meet the conditions of subparagraph (A) of this paragraph.
 - (A) The net emissions increase may not:
- (i) considering the emission reductions that will result from the project, cause or contribute to a violation of any national ambient air quality standard;
- $\hbox{ (ii) cause or contribute to a violation of any Prevention of Significant Deterioration (PSD) increment; or }$
 - (iii) cause or contribute to a violation of any PSD visibility limitation.
- (B) For purposes of this section, "significant net increase" means those emissions increases resulting solely from the installation of control equipment or implementation of control techniques that are equal to or greater than:
- (i) the major modification threshold listed in §116.12 of this title (relating to Nonattainment Review Definitions), Table I, for pollutants for which the area is designated as nonattainment, or for precursors to these pollutants; or
- (ii) significant as defined in Title 40 CFR §52.21(b)(23) (effective July 20, 1993) for pollutants for which the area is designated attainment or unclassifiable, or for precursors to these pollutants.
- (C) Netting is not required when determining whether this demonstration must be made for the proposed project. The increases and decreases in emissions resulting from the project must be included in any future netting calculation if they are determined to be otherwise creditable under PSD and nonattainment new source review provisions of the Federal Clean Air Act (FCAA), Parts C and D and regulations promulgated thereunder.

(9) For purposes of compliance with the PSD and nonattainment new source review provisions of the FCAA, Parts C and D and regulations promulgated thereunder, any increase that is less than significant, or satisfies the requirements of paragraph (8) of this section does not constitute a physical change or a change in the method of operation. For purposes of compliance with the Standards of Performance for New Stationary Sources regulations promulgated by the United States Environmental Protection Agency at 40 CFR §60.14 (effective December 16, 1975), an increase that satisfies the requirements of paragraph (8) of this section also satisfies the requirements of 40 CFR §60.14(e)(5).

Adopted April 30, 1997

Effective May 22, 1997

§116.620. Installation and/or Modification of Oil and Gas Facilities.

- (a) Emission specifications.
 - (1) Venting or flaring more than 0.3 long tons per day of total sulfur shall not be allowed.
- (2) No facility shall be allowed to emit total uncontrolled emissions of sulfur compounds, except sulfur dioxide (SO₂), from all vents (excluding process fugitives emissions) equal to or greater than four pounds per hour unless the vapors are collected and routed to a flare.
- (3) Any vent, excluding any safety relief valves that discharge to the atmosphere only as a result of fire or failure of utilities, emitting sulfur compounds other than SO₂ shall be at least 20 feet above ground level.
- (4) New or modified internal combustion reciprocating engines or gas turbines permitted under this standard permit shall satisfy all of the requirements of Standard Exemption Number 6, except that registration using the Form PI-7 or PI-8 shall not be required. Emissions from engines or turbines shall be limited to the amounts found in §116.211(a)(1) of this title (relating to Standard Exemption List).
- (5) Total Volatile Organic Compound (VOC) emissions from a natural gas glycol dehydration unit shall not exceed ten tons per year (tpy) unless the vapors are collected and controlled in accordance with subsection (b)(2) of this section.
- (6) Any combustion unit (excluding flares, internal combustion engines, or natural gas turbines), with a design maximum heat input greater than 40 million British thermal units (Btu) per hour (using lower heating values) shall not emit more than 0.06 pounds of nitrogen oxides per million Btu.
- (7) No facility which is less than 500 feet from the nearest off-plant receptor shall be allowed to emit uncontrolled VOC process fugitive emissions equal to or greater than ten tpy, but less than 25 tpy, unless the equipment is inspected and repaired according to subsection (c)(1) of this section.
- (8) No facility which is 500 feet or more from the nearest off-plant receptor shall be allowed to emit uncontrolled VOC process fugitive emissions equal to or greater than 25 tpy unless the equipment is inspected and repaired according to subsection (c)(1) of this section.

- (9) No facility which is less than 500 feet from the nearest off-plant receptor shall be allowed to emit uncontrolled VOC process fugitive emissions equal to or greater than 25 tpy unless the equipment is inspected and repaired according to subsection (c)(2) of this section.
- (10) No facility shall be allowed to emit uncontrolled VOC process fugitive emissions equal to or greater than 40 tpy unless the equipment is inspected and repaired according to subsection (c)(2) of this section.
- (11) No facility which is located less than 1/4 mile from the nearest off-plant receptor shall be allowed to emit hydrogen sulfide (H_2S) or SO_2 process fugitive emissions unless the equipment is inspected and repaired according to subsection (c)(3) of this section. No facility which is located at least 1/4 mile from the nearest off-plant receptor shall be allowed to emit H_2S or SO_2 process fugitive emissions unless the equipment is inspected and repaired according to subsection (c)(3) of this section or unless the H_2S or SO_2 emissions are monitored with ambient property line monitors according to subsection (e)(1) of this section. Components in sweet crude oil or gas service as defined by Chapter 101 of this title (relating to General Rules) are exempt from these limitations.
- (12) Flares shall be designed and operated in accordance with 40 Code of Federal Regulations (CFR), Part 60.18 or equivalent standard approved by the commission, including specifications of minimum heating values of waste gas, maximum tip velocity, and pilot flame monitoring. If necessary to ensure adequate combustion, sufficient gas shall be added to make the gases combustible. An infrared monitor is considered equivalent to a thermocouple for flame monitoring purposes. An automatic ignition system may be used in lieu of a continuous pilot.
- (13) Appropriate documentation shall be submitted to demonstrate that compliance with the Prevention of Significant Deterioration (PSD) and nonattainment new source review provisions of the Federal Clean Air Act, Parts C and D, and regulations promulgated thereunder, are being met. The oil and gas facility shall be required to meet the requirements of Subchapter B of this chapter (relating to New Source Review Permits) instead of this subchapter if a PSD or nonattainment permit is required.
- (14) Documentation shall be submitted to demonstrate compliance with applicable New Source Performance Standards (NSPS, 40 CFR 60) and National Emission Standards for Hazardous Air Pollution (NESHAP, 40 CFR 61).
- (15) New and increased emissions shall not cause or contribute to a violation of any National Ambient Air Quality Standard or regulation property line standards as specified in Chapters 111, 112, and 113 of this title (relating to Control of Air Pollution From Visible Emissions and Particulate Matter; Control of Air Pollution From Sulfur Compounds; and Control of Air Pollution From Toxic Materials). Engineering judgment and/or computerized air dispersion modeling may be used in this demonstration. To show compliance with §116.610(a)(1) of this title (relating to Applicability) for H₂S emissions from process vents, ten milligrams per cubic meter shall be used as the "L" value instead of the value represented by §116.610(a)(1) of this title.
- (16) Fuel for all combustion units and flare pilots shall be sweet natural gas or liquid petroleum gas, fuel gas containing no more than ten grains of total sulfur per 100 dry standard cubic feet

(scdf), or field gas. If field gas contains more than 1.5 grains of H_2S or 30 grains total sulfur compounds per 100 scdf, the operator shall maintain records, including at least quarterly measurements of fuel H_2S and total sulfur content, which demonstrate that the annual SO_2 emissions from the facility do not exceed the limitations listed in the standard permit registration. If a flare is the only combustion unit on a property, the operator shall not be required to maintain such records on flare pilot gas.

(b) Control requirements.

98% is achieved; or

- (1) Floating roofs or equivalent controls shall be required on all new or modified storage tanks, other than pressurized tanks which meet Standard Exemption 83, unless the tank is less than 25,000 gallons in nominal size or the vapor pressure of the compound to be stored in the tank is less than 0.5 pounds per square inch absolute (psia) at maximum short-term storage temperature.
- (A) For internal floating roofs, mechanical shoe primary seal or liquid-mounted primary seal or a vapor-mounted primary with rim-mounted secondary seal shall be used.
- (B) Mechanical shoe or liquid-mounted primary seals shall include a rim-mounted secondary seal on all external floating roofs tanks. Vapor-mounted primary seals will not be accepted.
- (C) All floating roof tanks shall comply with the requirements under 115.112(a)(2)(A)-(F) of this title (relating to Control Requirements).
 - (D) In lieu of a floating roof, tank emissions may be routed to:
 - (i) a destruction device such that a minimum VOC destruction efficiency of
- (ii) a vapor recovery system such that a minimum VOC recovery efficiency of 95% is achieved.
- (E) Independent of the exemptions listed in this paragraph, if the emissions from any fixed roof tank exceed ten tpy of VOC or ten tpy of sulfur compounds, the tank emissions shall be routed to a destruction device, vapor recovery unit, or equivalent method of control that meets the requirements listed in subparagraph (D) of this paragraph.
- (2) The VOC emissions from a natural gas glycol dehydration unit shall be controlled as follows.
- (A) If total uncontrolled VOC emissions are equal to or greater than ten tpy, but less than 50 tpy, a minimum of 80% by weight minimum control efficiency shall be achieved by either operating a condenser and a separator (or flash tank), vapor recovery unit, destruction device, or equivalent control device.
- (B) If total uncontrolled VOC emissions are equal to or greater than 50 tpy, a minimum of:

- (i) 98% by weight minimum destruction efficiency shall be achieved by a destruction device or equivalent; or
- (ii) 95% by weight minimum control efficiency shall be achieved by a vapor recovery system or equivalent.
 - (c) Inspection requirements.
- (1) Owners or operators who are subject to subsection (a)(7) or (8) of this section shall comply with the following requirements.
- (A) No component shall be allowed to have a VOC leak for more than 15 days after the leak is detected to exceed a VOC concentration greater than 10,000 parts per million by volume (ppmv) above background as methane, propane, or hexane, or the dripping or exuding of process fluid based on sight, smell, or sound for all components. The VOC fugitive emission components which contact process fluids where the VOCs have an aggregate partial pressure or vapor pressure of less than 0.5 psia at 100 degrees Fahrenheit are exempt from this requirement. If VOC fugitive emission components are in service where the operating pressure is at least 0.725 pounds per square inch (psi) (five kilopascals (Kpa)) below ambient pressure, then these components are also exempt from this requirement as long as the equipment is identified in a list that is made available upon request by the agency representatives, the United States Environmental Protection Agency (EPA), or any other air pollution agency having jurisdiction. All piping and valves two inches nominal size and smaller, unless subject to federal NSPS requiring a fugitive VOC emissions leak detection and repair program or Chapter 115 of this title (relating to Control of Air Pollution from Volatile Organic Compounds), are also exempt from this requirement.
- (B) All technically feasible repairs shall be made to repair a VOC leaking process fugitive component within 15 days after the leak is detected. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. The executive director, at his discretion, may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.
- (C) New and reworked underground process pipelines containing VOCs shall contain no buried valves such that process fugitive emission inspection and repair is rendered impractical.
- (D) To the extent that good engineering practice will permit, new and reworked valves and piping connections in VOC service shall be so located to be reasonably accessible for leak-checking during plant operation. Valves elevated more than two meters above a support surface will be considered non-accessible and shall be identified in a list to be made available upon request.
- (E) New and reworked piping connections in VOC service shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Flanges in VOC service shall be inspected

by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

- (F) Each open-ended valve or line in VOC service, other than a valve or line used for safety relief, shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.
- (G) Accessible valves in VOC service shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer. For valves equipped with rupture discs, a pressure gauge shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity, but no later than the next process shutdown. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc or venting to a control device are exempt from monitoring.
- (H) Dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system, submerged pumps, or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic driven pumps) are exempt from monitoring.
- (I) All other pump and compressor seals emitting VOC shall be monitored with an approved gas analyzer at least quarterly.
- (J) After completion of the required quarterly inspections for a period of at least two years, the operator of the oil and gas facility may request in writing to the Office of Air Quality, New Source Review Division that the monitoring schedule be revised based on the percent of valves leaking. The percent of valves leaking shall be determined by dividing the sum of valves leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements. This request shall include all data that has been developed to justify the following modifications in the monitoring schedule.
- (i) After two consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0%, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- (ii) After five consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0%, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- (2) Owners or operators who are subject to subsection (a)(9) or (10) of this section shall comply with the following requirements.
- (A) No component shall be allowed to have a VOC leak for more than 15 days after the leak is found which exceeds a VOC concentration greater than 500 ppmv for all components except pumps and compressors and greater than 2,000 ppmv for pumps and compressors above background as methane, propane, or hexane, or the dripping or exuding of process fluid based on sight, smell, or sound. The VOC fugitive emission components which contact process fluids where the VOCs have an aggregate partial

pressure or vapor pressure of less than 0.044 psia at 100 degrees Fahrenheit are exempt from this requirement. If VOC fugitive emission components are in service where the operating pressure is at least 0.725 psi (five Kpa) below ambient pressure, these components are also exempt from this requirement as long as the equipment is identified in a list that is made available upon request by agency representatives, the EPA, or any air pollution control agency having jurisdiction. All piping and valves two inches nominal size and smaller are also exempt from this requirement.

- (B) All technically feasible repairs shall be made to repair a VOC leaking process fugitive component within 15 days after the leak is detected. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. The executive director, at his or her discretion, may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.
- (C) New and reworked underground process pipelines containing VOCs shall contain no buried valves such that process fugitive emission inspection and repair is rendered impractical.
- (D) To the extent that good engineering practice will permit, new and reworked valves and piping connections in VOC service shall be so located to be reasonably accessible for leak-checking during plant operation. Valves elevated more than two meters above a support surface will be considered non-accessible and shall be identified in a list to be made available upon request.
- (E) New and reworked piping connections in VOC service shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Flanges in VOC service shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.
- (F) Each open-ended valve or line in VOC service, other than a valve or line used for safety relief, shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.
- (G) Accessible valves in VOC service shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer. For valves equipped with rupture discs, a pressure gauge shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity, but no later than the next process shutdown. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc or venting to a control device are exempt from monitoring.
- (H) Dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order or seals equipped with an automatic seal failure detection and alarm system, submerged pumps, or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic driven pumps) are exempt from monitoring.

- (I) All other pump and compressor seals emitting VOC shall be monitored with an approved gas analyzer at least quarterly.
- (J) After completion of the required quarterly inspections for a period of at least two years, the operator of the oil and gas facility may request in writing to the Office of Air Quality, New Source Review Division that the monitoring schedule be revised based on the percent of valves leaking. The percent of valves leaking shall be determined by dividing the sum of valves leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements. This request shall include all data that have been developed to justify the following modifications in the monitoring schedule.
- (i) After two consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0%, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- (ii) After five consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0%, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- (K) A directed maintenance program shall be used and consist of the repair and maintenance of VOC fugitive emission components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. Replaced components shall be remonitored within 30 days of being placed back into VOC service.
- (3) For owners and operators who are subject to the applicable parts of subsection (a)(11) of this section, auditory and visual checks for SO_2 and H_2S leaks within the operating area shall be made every day. Immediately, but no later than eight hours upon detection of a leak, operating personnel shall take the following actions:
 - (A) isolate the leak; and
 - (B) commence repair or replacement of the leaking component; or
- (C) use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.
 - (d) Approved test methods.
- (1) An approved gas analyzer used for the VOC fugitive inspection and repair requirement in subsection (c) of this section, shall conform to requirements listed in 40 CFR 60.485(a) and (b).
- (2) Tutweiler analysis or equivalent shall be used to determine the H₂S content as required under subsections (a) and (e) of this section.

- (3) Proper operation of any condenser used as a VOC emissions control device to comply with subsection (a)(5) of this section shall be tested to demonstrate compliance with the minimum control efficiency. Sampling shall occur within 60 days after start-up of new or modified facilities. The permittee shall contact the Engineering Services Section, Air Quality Enforcement Division 45 days prior to sampling for approval of sampling protocol. The appropriate regional office in the region where the source is located shall also be contacted 45 days prior to sampling to provide them the opportunity to view the sampling. Neither the regional office nor the Engineering Services Section, Air Quality Enforcement Division personnel are required to view the testing. Sampling reports which comply with the provisions of the "TNRCC Sampling Procedures Manual," Chapter 14 ("Contents of Sampling Reports," dated January 1983 and revised July 1985), shall be distributed to the appropriate regional office, any local programs, and the Engineering Services Section, Air Quality Enforcement Division.
 - (e) Monitoring and recordkeeping requirements.
- (1) If the operator elects to install and maintain ambient H_2S property line monitors to comply with subsection (a)(11) of this section, the monitors shall be approved by the Engineering Services Section, Air Quality Enforcement Division office in Austin, and shall be capable of detecting and alarming at H_2S concentrations of ten ppmv. Operations personnel shall perform an initial on-site inspection of the facility within 24 hours of initial alarm and take corrective actions as listed in subsection (c)(3)(A)-(C) of this section within eight hours of detection of a leak.
- (2) The results of the VOC leak detection and repair requirements shall be made available to the executive director, his or her designated representative, or any air pollution control agency having jurisdiction upon request. Records, for all components, shall include:
 - (A) appropriate dates;
 - (B) test methods;
 - (C) instrument readings;
 - (D) repair results; and
 - (E) corrective actions. Records of flange inspections are not required unless a leak

is detected.

- (3) Records for repairs and replacements made due to inspections of H_2S and SO_2 components shall be maintained.
- (4) Records shall be kept for each production, processing, and pipeline tank battery or for each storage tank if not located at a tank battery, on a monthly basis, as follows:
- (A) tank battery identification or storage tank identification, if not located at a tank battery;

- (B) compound stored;
- (C) monthly throughput in barrels/month; and
- (D) cumulative annual throughput, barrels/year.
- (5) A plan shall be submitted to show how ongoing compliance will be demonstrated for the efficiency requirements listed in subsection (b)(1)(D) of this section. The demonstration may include, but is not limited to, monitoring flowrates, temperatures, or other operating parameters.
- (6) Records shall be kept on at least a monthly basis of all production facility flow rates (in standard cubic feet per day) and total sulfur content of process vents or flares or gas processing streams. Total sulfur shall be calculated in long tons per day.
- (7) Records shall be kept of all ambient property line monitor alarms and shall include the date, time, duration, and cause of alarm, date and time of initial on-site inspection, and date and time of corrective actions taken.
- (8) All required records shall be made available to representatives of the agency, the EPA, or local air pollution control agencies upon request and be kept for at least two years. All required records shall be kept at the plant site, unless the plant site is unmanned during business hours. For plant sites ordinarily unmanned during business hours, the records shall be maintained at the nearest office in the state having day-to-day operations control of the plant site.

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§116.621. Municipal Solid Waste Landfills.

A person may claim a standard permit for the construction or modification to a municipal solid waste landfill (MSWLF) or municipal solid waste facility (MSW facility) as defined in §101.1 of this title (relating to Definitions), including, but not limited to, Type I, Type I-AE, Type II, Type III, Type IV, Type IV-AE, Type VI, and Type IX sites as defined in §330.41 of this title (relating to Types of Municipal Solid Waste Sites).

- (1) An MSWLF and associated waste acceptance and handling facilities which comply with §116.610 of this title (relating to Applicability), except §116.610(a)(1) of this title; §116.611 of this title (relating to Registration Requirements); §116.614 of this title (relating to Standard Permit Fees); and §116.615 of this title (relating to General Conditions) qualify for a standard permit.
- (2) Separate permit authorization under Subchapter B of this chapter (relating to New Source Review Permits) must be obtained for the following:
 - (A) industrial solid waste solidification/stabilization facilities;
 - (B) outdoor burning;

- (C) waste incineration other than that used to control landfill gas emissions;
- (D) landfill cells in which any regulated quantities of hazardous waste will be placed;
- (E) MSWLF and MSW facilities with passive collection systems as defined in 40 Code of Federal Regulations (CFR), §60.751; and
- (F) any project which constitutes a new major source, or major modification under the new source review requirements of the Federal Clean Air Act, Part C (Prevention of Significant Deterioration review) or Part D (nonattainment review) and regulations promulgated thereunder shall be subject to the requirements of §116.110 of this title (relating to Applicability) rather than this subchapter.
- (3) Registration shall include, in addition to the information required by §116.611 of this title, an initial design capacity report in accordance with 40 CFR, §60.757(a)(2).
- (4) The permit holder shall comply with the air emissions standards as specified in 40 CFR Part 60, Subpart WWW, with the following additions and changes.
- (A) The gas collection and control system (GCCS) shall conform with specifications for active collection systems as specified in 40 CFR, §60.759.
- (B) The GCCS shall be designed to control nonmethane organic compounds (NMOC) gas emissions in one or more of the following ways by routing the total collected gas to:
- (i) an open flare with a minimum height of 30 feet and which satisfies all of the requirements of §116.211 of this title (relating to Standard Exemption List), Standard Exemption Number 80, except that registration using Form P1-7 or P1-8 shall not be required;
- (ii) a control device (such as an enclosed flare) with a minimum vent release height of 30 feet and which reduces the total collected NMOC gas emissions by 98%, or to less than 20 parts per million by volume (ppmv), as hexane;
- (iii) a gas treatment system that processes the collected gas for subsequent use or sale. The sum of all emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of clause (ii) of this subparagraph;
- (iv) gas or liquid fuel-fired stationary internal combustion reciprocating engines or gas turbines that satisfy all of the requirements of §116.211 of this title, Standard Exemption Number 6, except that registration using Form PI-7 or PI-8 shall not be required; or
- (v) boilers, heaters, or other combustion units, but not including stationary internal combustion engines or turbines, that satisfy all of the requirements of §116.211 of this title, Standard Exemption Number 7.

- (C) The active GCCS may be capped or removed only if, in addition to the requirements listed in 40 CFR, 60.752(b)(2)(v), the MSWLF is permanently closed pursuant to 330.256 of this title (relating to Closure and Post-closure).
 - (5) MSWLF owners and operators shall monitor and control particulate matter as follows.
- (A) All material handling and transport operations shall be conducted in a manner so as to minimize any fugitive particulate matter emissions.
- (B) Roads and other areas subject to vehicle traffic shall be paved and cleaned, watered, or treated with dust-suppressant chemicals as necessary to control particulate matter emissions.
- (C) During excavation, MSWLF cells shall be watered or treated with dust-suppressant chemicals as necessary to control particulate matter emissions.
- (6) High volume air sampling for net ground level concentrations of total particulate matter shall be performed upon request of the executive director or a designated representative. Each test shall consist of at least one upwind and one downwind sample taken simultaneously. The tests shall be performed during normal operations. A monitoring plan for high volume sampling shall be developed in accordance with the Office of Air Quality Management Plan, Appendix I (United States Environmental Protection Agency (EPA) Requirements for Quality Assurance Project Plans, dated February 1995) and the "TNRCC Sampling Procedures Manual," Chapter 11 ("Particulate Matter," dated January 1983 and revised July 1985), and shall require approval by the executive director or a designated representative prior to sampling. The executive director or a designated representative shall be afforded the opportunity to observe all such sampling equipment, operations, and records upon request.
- (7) GCCS components (compressor seals, pipeline valves, pressure relief valves in gaseous service, flanges, and pump seals) at an MSWLF or MSW facility, where the total of all estimated uncontrolled fugitive emissions from all components is greater than ten tons per year, shall be inspected and maintained pursuant to the requirements of §116.620(c)(1)(A)-(J) of this title (relating to Installation and/or Modification of Oil and Gas Facilities), with the following changes and additions.
- (A) Instead of the definition in \$116.620(c)(1)(A) of this title, a leak shall be defined as the escape of gas with a total organic compound concentration greater than or equal to 10,000 ppmv above background as methane; or the dripping or exuding of process fluid based on sight, smell, or sound.
- (B) In §116.620(c)(1)(C) of this title, new and reworked underground pipelines containing NMOC that are located within the gas collection area and are in continuous vacuum service may contain buried valves.
- (C) In \$116.620(c)(1)(E) of this title, high density polyethylene pipe connections may be fused or flanged.
 - (D) In addition to those components exempted in §116.620(c)(1)(A)-(J) of this

title, the following additional components are exempt from the maintenance and inspection protocols:

- (i) components which are in a continuous vacuum service;
- (ii) valves which are not externally regulated, such as in-line check valves;
- (iii) pressure relief valves which are downstream of an intact rupture disc;

and

- (iv) reciprocating compressors which are equipped with degassing vents and vent control systems.
- (E) Alternate methods of fugitive monitoring may be used, subject to the approval of the executive director.
- (8) The owner or operator of each MSWLF unit shall maintain complete and up-to-date records sufficient to readily determine continuous compliance with the requirements of this section for the previous five years of operation. All the records shall be maintained in an operating record in accordance with §330.113(b)(11) of this title (relating to Recordkeeping Requirements). The records shall be available for review upon request by representatives or any local air pollution agency having jurisdiction. The following recordkeeping requirements shall apply, in addition to those specified in 40 CFR 60, Subpart WWW.
- (A) Permit holders who are subject to a standard exemption specified in paragraph (4) of this section shall maintain any records specified in the exemption.
- (B) Permit holders who are subject to paragraph (7) of this section shall maintain a leaking-components log in accordance with §116.620(e)(2) of this title.

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